CALL FOR PARTICIPATION

The Department of Statistics and the Department of Industrial & Operations Engineering of the Instituto Tecnológico Autónomo de México (ITAM), and the sponsoring organizations, the International Association for Statistical Computing (IASC) and the International Statistical Institute (ISI) are proud to announce the V Latin American Conference on Statistical Computing (LACSC 2020) to be held in Mexico City from June 9 to June 11, 2020.

LACSC is the annual conference of the Latin American Regional Section of the International Association for Statistical Computing (LARS-IASC). The main purpose of LACSC is to foster the progress of the theory, methods and practice of statistical computing in Latin America. In 2020 we will have the 5th edition of LASCSC in Mexico City, following its previous successful editions of 2016 in Gramado (Brazil), 2017 in Valparaíso (Chile), 2018 in San José (Costa Rica), and 2019 in Guayaquil (Ecuador).

THE CONFERENCE

LACSC 2020 will consider the presentation of papers that allow us to know the scientific and technological progress in all the areas related to the theory and applications of Statistical Computing, for the benefit of the Latin American community, becoming the most appropriate space for the academic and professional community of Latin América to exchange ideas, establish professional and academic contacts, and discuss development and research in the areas related to statistical computing. The presentation of papers as part of contributed, invited and poster (panels) sessions is thus considered. Selected peer reviewed papers will be considered for publication in a special issue of *Computational Statistics*, and authors are also encouraged to submit their papers to *Computational Statistics & Data Analysis*, the official journal of IASC.

The theme of our Conference is "Statistical Computing for Intelligent Decision Making", and further information about LACSC 2020 can be found in our website http://lacsc2020.itam.mx./

THE SCHOOL

To increase the development of human capital in computational statistics and support its progress, LARS-IASC aims to implement a School on Computational Statistics and Data Science (LARS-IASC School). The main purpose of the LARS-IASC School is to spread the knowledge base and advances in Computational Statistics in the Latin American countries and to increase the number of researchers and data scientists in the field. Before the beginning of LACSC 2020 (on June 7-8, 2020), the 3rd LARS-IASC School on Computational Statistics and Data Science will take place at the ITAM facilities. The theme of the School will be "Stochastic Simulation and Reinforcement Learning".

SCHOLARSHIPS FOR LACSC 2020 AND 3rd LARS-IASC SCHOOL ON COMPUTATIONAL STATISTICS AND DATA SCIENCE

For LACSC 2020 our sponsorship institution, the IASC will provide:

- A limited number of scholarships – 100% waiver in registration fee for people living in the following countries: http://data.worldbank.org/income-level/LIC and http://data.worldbank.org/income-level/LMC.

For the 3rd LARS-IASC School on Computational Statistics and Data Science the IASC will provide:

- Up to 10 scholarships – 100% waiver in registration fee for people living in developing countries (from the lists in the links provided above).
- 1 full scholarship that includes registration fee, travel and stay expenses.

To apply for these scholarships, the candidates must:

- Be a member of the International Association for Statistical Computing (IASC). More information on how to become a member can be found here: **http://iasc-isi.org/become-a-member/.**
- At the time of the application and of the events be living and working/studying in a developing country.

Further information on the School can be found in the Conference website http://lacsc2020.itam.mx

CONFERENCE VENUE

LACSC 2020 will take place in the Santa Teresa campus of the ITAM, located at the south of Mexico City, capital of the Estados Unidos Mexicanos (official name of the country). This city was originally built on an islet where some natives found an eagle devouring a snake and was called Tenochtitlan. Chinampas for agriculture were built around it and became the capital of the Aztec Empire. With the arrival of the Spaniards in 1521, Mexico City fell under its dominance and became the center of the economic activity of the power of New Spain. Its outstanding colonial architecture earned it recognition as the City of Palaces. Currently, Mexico City stands in a valley surrounded by volcanoes, proud of its heritage, the product of the fusion of two cultures. It is the largest and most populous city in Latin America and one of the most dynamic capitals in the world; It has many museums, theaters, concert halls, archeological ruins, theme parks and recreational parks. In addition, it offers a great gastronomic variety typical of all regions of Mexico and the world.

ORGANIZER Instituto Tecnológico Autónomo de México (ITAM);

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LOCAL ORGANIZING COMMITTEE

The organization of LACSC 2020 is in charge of the Department of Statistics and the Department of Industrial & Operations Engineering of the ITAM. There is a general coordinator and several faculty collaborating in the organization.

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TOPICS

Topics that are of special interest for LACSC 2020 include research related to the theory, methods, application, and use of software related to statistical computing. Among these (not excluding others), statistical computing techniques related to:

- Big data analysis and data science
- Multivariate analysis
- Multidimensional data analysis
- Bayesian statistics
- Functional data analysis
- Deep learning
- Machine learning and artificial intelligence
- Parallel computing for computational statistics
- Optimization and optimization heuristics
- Simulation and Monte Carlo methods
- Numerical methods of statistics
- Clustering methods and classification
- Kernel methods
- Times series analysis

- Robust statistics
- Symbolic data analysis
- Compositional data analysis
- Censored data analysis
- Statistical algorithms
- Statistical software
- Extreme value theory
- Spatial statistics
- Biostatistics
- Data visualization
- Nonparametric statistics
- Sampling methods
- Mixture models
- Categorical data analysis
- Multi-block methods
- Latent variable models
- Text mining
- Data structure and complex data
- Integration of data from different sources
- Statistical applications: environmental sciences, climate sciences, biomedical sciences, chemical sciences and chemometrics, econometrics and finance, engineering, astronomy and physics, agronomy and forestry sciences, energy, sustainable development, mining sciences, social web, TIC's, security, biometry, internet of things, natural disaster modeling (earthquakes, tsunamis, foods, hurricanes, tornadoes, forest fires).

IMPORTANT DEADLINES

Deadline	Activity
February 20, 2020	Abstract (invited and contributed) and Poster proposals reception
March 20, 2020	Communication of evaluation result to authors
April 13, 2020	Receipt of final accepted papers and with registration payment
April 20, 2020	Book of Abstracts and book of Proceedings
April 27, 2020	Submission of Preliminary Program to all authors
May 4, 2020	Final Program LACSC 2020

ABSTRACT AND POSTER PROPOSAL RECEPTION

Researchers interested in presenting their research in a contributed session should submit an Abstract (in English) according to the simple format indicated in this Call before February 20, 2020. An example of a format is found on the Conference website, **http://lacsc2020.itam.mx**. Authors whose abstracts are accepted can present their work in a scheduled oral session or as a poster, in the corresponding session.
The process of sending and accepting an Abstract is through the platform specially created for LACSC 2020: https://easychair.org/conferences/?conf=lacsc2020 Each author must create an identification as a user for the entire submission process, as indicated on the platform.
Any additional communication related to a presentation proposal or other aspects of the Conference must be made directly with the Organizing Committee: lacsc2020@itam.mx

INVITED SESSION PROPOSAL RECEPTION

Researchers interested in proposing an invited session should submit the corresponding session title and abstracts (in English) for the session according to the simple format indicated in this Call before February 20, 2020. An example of a format is found on the Conference website, **http://lacsc2020.itam.mx**. Abstracts and title of the session should be sent by email (davidm@itam.mx) to David F. Muñoz (Chair of the Scientific Program Committee).

FINAL PAPER PROPOSALS

- Researchers interested in publishing his work in a book of proceedings with ISBN, must send their paper proposals (in English) through the platform specially created for LACSC 2020: https://easychair.org/conferences/?conf=lacsc2020
- An example of paper proposal in the appropriate format is found on the Conference website: **http://lacsc2020.itam.mx**
- In the following link the authors must create their users and upload their corresponding Abstract/Paper proposal: https://easychair.org/conferences/?conf=lacsc2020
- Submission of a final paper proposal is optional and, in the case the paper is accepted for publication in the Book of Proceedings, the authors keep their copyright, so that they can submit a revised version to the journal of their preference.

All authors will be notified of the receipt of their Abstract proposal, as soon as they are received. The authors, whose research have been accepted for presentation, will be notified during the month of March 2020. On that date the official notification of acceptance will be sent so that the authors can prepare a final abstract and an optional final paper, and can begin the process of permits and financing to comply with the deadlines established by the Organizing Committee.

CONFERENCE OFFICIAL PUBLICATIONS

The Organizing Committee undertakes to give the widest dissemination to the works presented at LACSC 2020 so that they are not confined to the attendees of the Conference but represent a contribution to knowledge and a way for the authors to be known in the Latin American community of Statistical Computing . This will be done through:

1.- Book of abstracts in paper format (for attendees) and in digital format for the community interested in http://lacsc2020.itam.mx and other available media.

2.- Book of proceedings with ISBN in digital format for authors and available to the interested community in http://lacsc2020.itam.mx and other available media.

3.- Selected peer reviewed papers will be considered for publication in a special issue of *Computational Statistics*, and authors are also encouraged to submit their papers to *Computational Statistics & Data Analysis*, the official journal of IASC.

LACSC 2020 AWARDS

Young researchers (up to 5 years after their last academic degree) attending the 5th LACSC will have the possibility to compete for the “Best LACSC 2020 Paper Award”. To be considered for the award, the young researcher must:

- Have completed an academic degree within the previous 5 years prior to LACSC 2020;
- Be a member of the International Association for Statistical Computing (IASC);
- Having sent an abstract for a contributed talk or being part of an Invited Paper Session of LACSC 2020 through the conference submission system.

The paper must deal with novel and interesting contributions to the theory and methodology, or the innovative use of statistical methods to address a substantive application, in Statistical Computing and related fields. The paper must be an unpublished, original work that is prepared mainly by a young researcher. Although it may have co-authors, the paper should be presented by the candidate at LACSC 2020 as either an invited or contributed paper.